

# Distribution of Houses by Predominant Materials of Roof and Wall and Level of Damage Risk

## CHHATTISGARH

Wall / Roof		Census Houses		Level of Risk under								Flood Prone Area in %
		No. of Houses	%	EQ Zone				Wind Velocity m/s				
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
STATE - CHATTISGARH						18.6	81.4			100		
WALL												
A1 - Mud & Unburnt Brick Wall	Rural	3,515,942	55.3									
	Urban	403,885	6.3									
	Total	3,919,827	61.6			M	L			M		
A2 - Stone Wall not packed with mortar	Rural	110,865	1.7									
	Urban	14,730	0.2									
	Total	125,595	1.9			M	L			L		
Total - Category - A		4,045,422	63.6									
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	1,133,013	17.8									
	Urban	983,896	15.5									
	Total	2,116,909	33.3			L	VL			L		
Total - Category - B		2,116,909	33.3									
C1 - Concrete Wall	Rural	25,793	0.4									
	Urban	26,695	0.4									
	Total	52,488	0.8			VL	VL			VL		
C2 - Wood wall	Rural	30,451	0.5									
	Urban	7,147	0.1									
	Total	37,598	0.6			VL	VL			M		
Total - Category - C		90,086	1.4									
X - Other Materials	Rural	80,836	1.3									
	Urban	27,858	0.4									
	Total	108,694	1.7			VL	VL			M		
Total - Category - X		108,694	1.7									
TOTAL HOUSES*		6,361,111										

<b>ROOF</b>												
<b>R1 - Light Weight Sloping Roof</b>	Rural	533,256	8.4									
	Urban	268,487	4.2									
	<b>Total</b>	<b>801,743</b>	<b>12.6</b>			L	VL			H		
<b>R2 - Heavy Weight Sloping Roof</b>	Rural	3,758,281	59.1									
	Urban	490,440	7.7									
	<b>Total</b>	<b>4,248,721</b>	<b>66.8</b>			L	VL			L		
<b>R3 - Flat Roof</b>	Rural	605,363	9.5									
	Urban	705,284	11.1									
	<b>Total</b>	<b>1,310,647</b>	<b>20.6</b>	<i>Damage Risk as per that for the Wall supporting it</i>								
<b>TOTAL HOUSES*</b>		<b>6,361,111</b>										

### Housing Category : Wall Types

**Category - A :** Buildings in field-stone, rural structures, unburnt brick houses, clay houses

**Category - B :** Ordinary brick building; buildings of the large block & prefabricated type, half-timbered structures, building in natural hewn stone

**Category - C :** Reinforced building, well built wooden structures

**Category - X :** Other materials not covered in A,B,C. These are generally light.

**Notes :** 1. Flood prone area includes that protected area which may have more severe damage under failure of protection works. In some other areas the local damage may be severe under heavy rains and choked drainage.

2. Damage Risk for wall types is indicated assuming heavy flat roof in categories A, B and C (Reinforced Concrete) building

3. Source of Housing Data : Census of Housing, GOI, 2011

### Housing Category : Roof Type

**Category - R1 -** Light Weight (Grass, Thatch, Bamboo, Wood, Mud, Plastic, Polythene, GI Metal, Asbestos Sheets, Other Materials)

**Category - R2 -** Heavy Weight (Tiles, Stone/Slate)

**Category - R3 -** Flat Roof (Brick, Concrete)

EQ Zone V : Very High Damage Risk Zone (MSK > IX)

EQ Zone IV : High Damage Risk Zone (MSK VIII)

EQ Zone III : Moderate Damage Risk Zone (MSK VII)

EQ Zone II : Low Damage Risk Zone (MSK < VI)

Level of Risk : VH = Very High; H = High;

M = Moderate; L = Low; VL = Very Low

\* Total No. of Houses excluding Vacant/Locked Houses